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with the predefined values for a match;

achieving a match thereof, and

computing a local address by the communications manager of the third processor element, and storing the results of the computation at the local address via the common bus to the local data memory.

#### REMARKS

The applicant and applicant's attorney are extremely grateful to the Examiner for the courtesy of the interview conducted on the Examiner's day off, and earlier than the Examiner's usual office hours, thereby accommodating the inventor who was traveling internationally.

Claim 16 has been amended as discussed with the Examiner during the interview. Claim 21 has been amended in a corresponding way.

Claim 26 has been added which is intended to contain the limitations of the original claims 16 and 17. Claim 27 has been added which is intended to contain the limitations of the original claims 16 and 20.

Claim 28, an apparatus claim which largely corresponds with claim 26, has been added which is intended to contain the limitations of the original claims 21 and 22. Claim 29, an apparatus claim which largely corresponds with claim 27, has been added which is intended to contain the limitations of the original claims 21 and 25.

Dependent claims 30 and 31 have been added which are directed to the case of two or more windows in a particular communications interface, as depicted for example in Fig. 3.

Claim 32 has been added which explicitly sets forth a series of steps in which two distinct nodes receive and obtain a match upon the same message.

**Information disclosure statement.** The Examiner is respectfully reminded of the Information Disclosure Statement filed September 12, 2001 and considered June 27, 2002, listing reference WO 91/10200. It is requested that the Examiner indicate whether or not this reference has been considered.

Form PTO/SB/22 is attached requesting an extension of time. Form PTO/SB/17 is attached to cover additional claims presented for the first time in this application. Form PTO-2038 is also attached. Reconsideration is requested.

Respectfully submitted,



Carl Oppedahl

PTO Reg. No. 32,746

Oppedahl & Larson LLP

P O Box 5068

Dillon, CO 80435-5068

email oppedahl@patents.com

Separate sheet

16. (Amended) A method of operating a parallel computer system having at least first and second processor elements, each processor element comprising a processor, a local program memory, a local data memory, a communications manager and an operating system, within each processor element the local program memory, local data memory, and communications manager all communicatively coupled by means of a common bus; the communications managers of the at least first and second processor elements communicatively coupled by means of a message-passing communications network; the processor elements each executing an application; each communications manager further comprising a plurality of predefined values indicative of a plurality of global addresses in which the application of the processor element is interested; the method comprising the steps of:

writing, by the processor of the first processor element, by means of the common bus of the first processor element, a result of a computation into the communications manager of the first processor element;

adding, by the communications manager, a global address to the result of the computation;

propagating, on the message-passing communications network, a message comprising the global address and the result of the computation;

receiving the message, via the message-passing communications network, by the communications manager of the second processor element;

comparing, by the communications manager of the second processor element, the global address with the plurality of predefined values for a match;

in the event of a match, computing a local address by the communications manager of the second

processor element, and storing the results of the computation at the local address via the common bus to the local data memory.

21. (amended) A parallel computer system having at least first and second processor elements, each processor element comprising a processor, a local program memory, a local data memory, a communications manager and an operating system, within each processor element the local program memory, local data memory, and communications manager all communicatively coupled by means of a common bus; the local data memories of the at least first and second processor elements not on a common bus; the communications managers of the at least first and second processor elements communicatively coupled by means of a message-passing communications network; the processor elements each executing an application; each communications manager further comprising a plurality of predefined values indicative of a plurality of global addresses in which the application of the processor element is interested;

for each communications manager, the communications manager comprising first means responsive to writing, by the processor of the processor element, by means of the common bus of the first processor element, a result of a computation into the communications manager of the first processor element, by adding a global address to the result of the computation, and by propagating, on the message-passing communications network, a message comprising the global address and the result of the computation;

for each communications manager, the communications manager comprising second means responsive to receiving a message, via the message-passing communications network, by the communications manager, for comparing the global address with the plurality of predefined values for a match, in the event of a match, for computing a local address, and storing the results of the computation at the local address via the common bus to the local data memory.